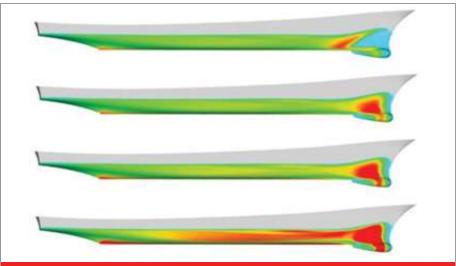
CREATE Portfolio www.hpc.mil

SUPPORT OF FUTURE SURFACE SHIP DESIGN & ACQUISITION

Success Story - Navy



Design trade space analysis enabled by HPCMP CREATE™ (Ships) RSDE software



PROBLEM

The Navy needs the capability to rapidly develop representative ship concept designs and explore the requirements trade-space through rapid design generation and analysis, to discover the regions of feasible, low cost, low risk, robust designs and to illustrate the cost vs. capability trade-offs.



SOLUTION

HPCMP CREATE™-SH RSDE (Rapid Ship Design Environment) allows for the rapid development of tens of thousands of individual balanced, analyzed, and costed concept baseline designs, enabling rapid identification of the feasible vs infeasible trade-space and visualization of cost vs. performance trade-offs. HPCMP CREATE™-SH IHDE enables rapid seakeeping evaluation of the concepts generated by RSDE, feeding the trade-space data.



IMPACT

RSDE has enable development of tens of thousands of concept variants to characterize the cost vs. capability trade-space and visualize requirements impacts for numerous acquisition programs and requirements evaluations teams such as the, Small Surface Combatant Task Force (SSCTF) Study, Future Amphibious Assault Ship (LX(R)) Analysis of Alternatives – Phase II, and Large Surface Combatant (LSC) Requirements Evaluation Team (RET). RSDE remains the early-stage design and analysis tool for all current and future US Navy surface ship acquisition programs work on requirement development & analysis, total ship technical integration & impact assessment, and total ship design development & analysis."which steer the multi-billion dollar LSC acquisition program.